

# NASA TECH BRIEF



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## KOPE (Kalendar Oriented Program Efforts) Provides Data for Management Decisions

KOPE is a computer program designed to establish controls over project efforts in order to assure management of meeting a specified completion date.

The input data requirements for KOPE consist of two groups of source information. The first group deals with the contractual terms, specifying the maximum cost, the period of the contract, and the program starting date. In the second group, the data include the total effort necessary to complete each of the major activities, their completion sequence, and their interdependence in the overall program. With these data, KOPE will be able to compute the starting and completion dates, the manning level for each activity, and the composite manning level for the program.

The first series of operations performed is to determine the critical path of the project effort. Simultaneously, while searching for the critical path, the program computes the factors that provide the maximum distribution of effort for each activity. The factors are used to determine the maximum time spans for each activity. Next the program determines the starting and completion dates for each activity. A unique built-in calendar system is used in assigning these dates.

KOPE then determines the manning-level requirements for each event and the composite manning-level with progression of time. An adjustment is made in this manning-level figure to account for overhead, sick leave, and paid vacations and holidays.

### Notes:

1. This program is written in Fortran IV for use on the IBM 7094 computer.
2. KOPE is a novel scheduling program which may be of interest to management personnel and organizations concerned with scheduling programming.
3. Inquiries concerning this program may be made to:

COSMIC  
Computer Center  
University of Georgia  
Athens, Georgia 30601  
Reference: B67-10478

### Patent status:

No patent action is contemplated by NASA.

Source: T. A. Karkainen  
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